No. 847,023. PATENTED MAR. 12, 1907.

A. E. OSTRANDER.

SEAT AND SEAT BACK FOR RAILWAY ROLLING STOCK.

APPLICATION FILED SEPT. 17, 1906.

Fig. 1.

Fig. 2.

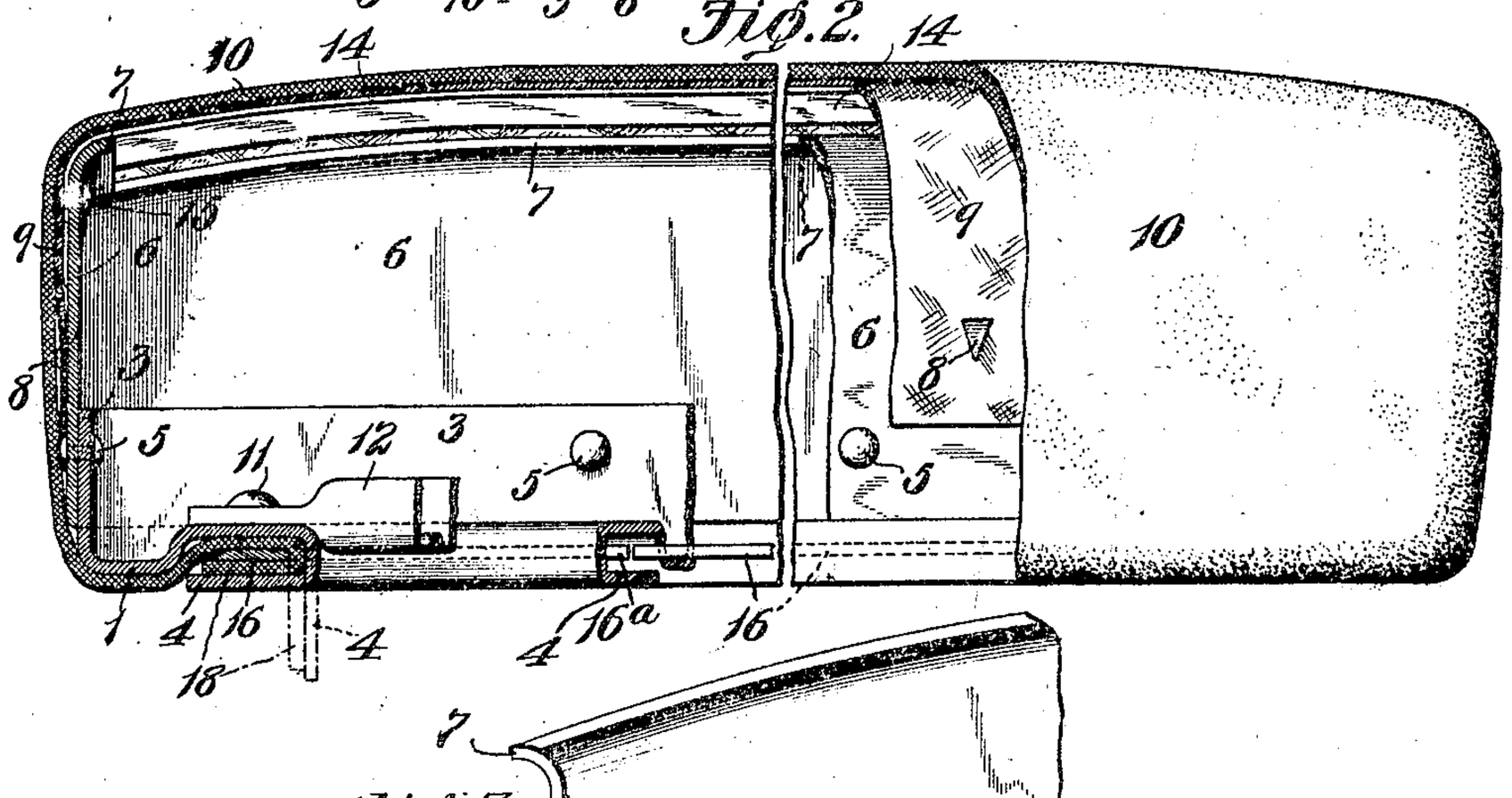

Fig. 3.

Witnesses:
Geo. A. Ladson.
Nellie L. Church

Inventor:
Allen E. Ostrander.
By Bakewell & Cornwall Attys.

UNITED STATES PATENT OFFICE.

ALLEN E. OSTRANDER, OF PATERSON, NEW JERSEY, ASSIGNOR TO AMERICAN CAR & FOUNDRY COMPANY, OF ST. LOUIS, MISSOURI, A CORPORATION OF NEW JERSEY.

SEAT AND SEAT-BACK FOR RAILWAY ROLLING-STOCK.

No. 847,023. Specification of Letters Patent. Patented March 12, 1907.

Application filed September 17, 1906. Serial No. 334,966.

To all whom it may concern:

Be it known that I, ALLEN E. OSTRANDER, a citizen of the United States, residing at Paterson, New Jersey, have invented a certain new and useful Improvement in Seats and Seat-Backs for Railroad Rolling-Stock, of which the following is a full, clear, and exact description, such as will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, forming part of this specification, in which—

Figure 1 is a top plan view, partly broken away, of a seat constructed in accordance with my invention. Fig. 2 is an enlarged end elevation, partly in transverse section, of the seat shown in Fig. 1; and Fig. 3 is a perspective view of one of the plates which form part of the seat-frame.

This invention relates to seats and seat-backs for railway rolling-stock.

The object of my invention is to provide a seat or seat-back that will be strong and inexpensive to manufacture and which is provided with a metallic frame.

I have herein only shown a seat constructed in accordance with my invention, as the seat-back is constructed in the same manner, so wherever I have used the term "seat" in the claims I mean to include a seat-back as well as a seat.

Referring to the drawings, which represent the preferred form of my invention, 1 designates four pressed-metal members, which members are mitered and connected together by gussets 2 to form a rectangular frame. Said members 1 are preferably of the shape and cross-section shown in Fig. 2 and comprise an upwardly-extending flange 3, a downwardly-extending flange 4, (shown in broken lines,) and an approximately S-shaped web which connects said flanges. Fastened to the upwardly-extending flanges 3 of said members by rivets 5 are plates 6, which are bent in the form of right angles and embrace the corners formed by the junction of the members 1, thereby greatly strengthening the frames and protecting the corners thereof. These plates 6 constitute the sides and ends of the frame and are of sufficient length so that their ends butt against each other, as shown in Fig. 1, and the upper edges of said plates are rolled or bent inwardly slightly at 7, as shown in Figs. 2 and 3, so as not to cut the upholstering material used in the construction of the seat.

With a construction of this character it is a very simple matter to make seats of any thickness by simply substituting plate 6 of the required depth. Preferably the plates 6 are provided with V-shaped projections or teeth 8, which can be formed by pressing portions of the plates outwardly, as shown in Fig. 3, these projections being utilized for securing the canvas covering 9, that is arranged underneath the outer covering 10 of the seat, and thus providing a very simple and inexpensive means of securing said canvas in position. Fastened to the webs of two of the members 1 by rivets 11 are slats 12, which support spiral springs 13, said slats preferably being channel-shaped and formed of pressed metal. The usual spring-bands 14 extend over the upper ends of the spiral springs and are connected by rivets 15 to the plates 6. The outer covering 10 for the seat may be of ratan, plush, or any suitable material and extends down over the plates 6 and underneath the members 1, as shown in Fig. 2, and splines 16, which may be strips of metal with separate corner-pieces 16^a are then put in place to force the covering 10 into the upwardly-curved portion of the S-shaped webs of the members 1. The edge portion 18 of said outer covering is folded underneath said splines, and the downwardly-projecting flanges 4 of the members 1 are then bent upwardly from the position shown in broken lines in Fig. 2 into the position shown in full lines to clamp the covering 10 against the underneath surface of the members 1. Preferably the webs of the members 1 are curved upwardly sufficiently to provide recesses which correspond in depth to the combined thickness of the splines 16, and the two thicknesses of outer covering wrapped about said splines, so that when the flanges 4 of the members 1 are bent upwardly they will lie flush with the outer surface of the covering 10, where it is bent underneath the members 1, as shown in Fig. 2.

Having thus described the invention, what

I claim as new, and desire to secure by Letters Patent, is—

1. A seat consisting of a metallic frame, an outer covering turned underneath said frame, splines placed upon the outer face of said covering for clamping the edge portions thereof against the underneath side of the frame, and depending flanges formed integral with said frame and adapted to be bent upwardly for securing said splines in position; substantially as described.

2. A seat consisting of a metallic frame, an outer covering turned underneath said frame, splines about which the edge portions of said outer covering are wrapped, and flanges on said frame which are adapted to be bent upwardly to clamp the covering against the underneath side of the frame; substantially as described.

3. A seat consisting of a metallic frame, having vertical walls and portions extending inwardly from said walls, an outer covering incasing said vertical walls and turned underneath the inwardly-extending portions of the frame, splines about which the edge portions of said covering are wrapped, and flanges on said inwardly-extending portions which are adapted to be bent into engagement with the outer covering to secure it in position; substantially as described.

4. A seat consisting of a metallic frame, having vertical walls and portions extending inwardly therefrom, said inwardly-extending portions being bent to form recesses, an outer covering incasing said vertical walls and inwardly-extending portions, and having a turned edge which lies in said recesses, and flanges on said inwardly-extending portions which are adapted to be bent into engagement with the turned edge of the outer covering to confine it in said recesses; substantially as described.

5. A seat-frame comprising flanged metallic members, gussets for securing said members together, and upwardly-extending plates fastened to the flanges of said metallic members and incasing the corners formed by the junction of said metallic members; substantially as described.

6. A seat consisting of a metallic frame, having vertical walls and inwardly-extending S-shaped portions, the upper edges of said vertical walls being curved inwardly, channel-shaped slats secured to the inwardly-projecting portions of the frame, springs mounted on said slats, spring-bands extending over the upper ends of said springs and being fastened to the vertical walls of the frame, a piece of fibrous material stretched over said spring-bands and secured to teeth formed integral with the vertical walls of the frame and an outer covering bent underneath the inwardly-extending portions of the frame, splines consisting of separate metal strips and corner-pieces about which the outer covering is wrapped, and flanges on the inwardly-extending portions of the frame adapted to be bent into engagement with the outer covering to clamp it and the splines against the inwardly-extending portions of the frame.

In testimony whereof I hereunto affix my signature, in the presence of two witnesses, this 5th day of September, 1906.

ALLEN E. OSTRANDER.

Witnesses:
ROBT. G. JEFFERY,
F. C. DUNHAM.